

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Satoru SHIRATORI

Serial No. Unassigned

Group Art Unit: Unassigned

Confirmation No. Unassigned

Filed: June 12, 2001

Examiner: Unassigned

For: MAGNET ROTOR AND HIGH-OUTPUT AC MACHINE HAVING THE SAME

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

Before examination of the above-identified application, please amend the application as follows:

IN THE CLAIMS

Please AMEND the claims in accordance with the following:

3. The magnet rotor as claimed in claim 1, wherein a step part formed lower than the outer peripheral face thereof is provided at both end parts in an axial direction of the outer peripheral face of said permanent magnet, and said sleeve is press-set in the step part.

4. The magnet rotor as claimed in claim 1, wherein said permanent magnet is arranged in plurality in parallel in an axial direction thereof.

5. The magnet rotor as claimed in claim 1, wherein said permanent magnets are bonded with a bonding agent said mutually neighboring magnet pieces.

6. The magnet rotor as claimed in claim 1, wherein said permanent magnet and said back yoke are bonded with a bonding agent having a low Young's modulus and a high coefficient of thermal expansion, such as a silicon rubber adhesive, or fixed with resin having a high Young's modulus, such as epoxy resin.

7. The magnet rotor as claimed in claim 1, wherein said sleeve is made of carbon fiber reinforced plastic or nonmagnetic metal.

8. The magnet rotor as claimed in claim 1, wherein said plate is made of stainless steel like SUS30 and nonmagnetic material such as Inconel.

9. The magnet rotor as claimed in claim 1, wherein said permanent magnet is fixed to said back yoke, and after balance adjusting said rotary shaft based on a bearing part as reference, magnetized integrally with the rotary shaft by a magnetizing machine.

10. An AC machine with a high output having a ring part fixed to a housing, a tooth part extending from the ring part to the inside in a radial direction, a stator made up with a coil wound round the tooth part, and one of the magnet rotors as claimed in claim 1 arranged in said part of the stator.

REMARKS

This Preliminary Amendment is submitted to improve the form of the specification as

originally-filed and to delete multiple dependent claims.

Also filed concurrently herewith is a Letter to the Examiner Requesting Approval of Changes to the Drawings. The identical Letter was filed and approved in the parent application.

It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

If any further fees are required in connection with the filing of this Preliminary Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Please AMEND the claims in accordance with the following:

3. The magnet rotor as claimed in claim 1[or 2], wherein a step part formed lower than the outer peripheral face thereof is provided at both end parts in an axial direction of the outer peripheral face of said permanent magnet, and said sleeve is press-set in the step part.
4. The magnet rotor as claimed in [any one of claims 1 to 3] claim 1, wherein said permanent magnet is arranged in plurality in parallel in an axial direction thereof.
5. The magnet rotor as claimed in [any one of claims 1 to 4] claim 1, wherein said permanent magnets are bonded with a bonding agent said mutually neighboring magnet pieces.
6. The magnet rotor as claimed in [any one of claims 1 to 5] claim 1, wherein said permanent magnet and said back yoke are bonded with a bonding agent having a low Young's modulus and a high coefficient of thermal expansion, such as a silicon rubber adhesive, or fixed with resin having a high Young's modulus, such as epoxy resin.
7. The magnet rotor as claimed in [any one of claims 1 to 6] claim 1, wherein said sleeve is made of carbon fiber reinforced plastic or nonmagnetic metal.
8. The magnet rotor as claimed in [any one of claims 1 to 7] claim 1, wherein said plate is made of stainless steel like SUS30 and nonmagnetic material such as Inconel.

9. The magnet rotor as claimed in [any one of claims 1 to 8] claim 1, wherein said permanent magnet is fixed to said back yoke, and after balance adjusting said rotary shaft based on a bearing part as reference, magnetized integrally with the rotary shaft by a magnetizing machine.

10. An AC machine with a high output having a ring part fixed to a housing, a tooth part extending from the ring part to the inside in a radial direction, a stator made up with a coil wound round the tooth part, and one of the magnet rotors as claimed in [any one of claims 1 to 9] claim 1 arranged in said part of the stator.

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